IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Fre application of: Scott et al.

Serial No. 08/319,745

Filed: 7 October 1994

For: PATCHED GENES AND THEIR USE

Group Art Unit: Not yet assigned

Examiner: Not yet assigned

Attorney Docket No. A-60190/BIR

STAN-171

Date: January 30, 1995

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to the Commissioner of Patents and Trademarks, Washington, D.C. 20231 on January 30, 1995.

Signed Lydia E. Epps

TRANSMITTAL LETTER FOR MISSING PARTS OF APPLICATION

Honorable Commissioner of Patents and Trademarks Washington, D.C. 20231

sir:

In complete response to the Notice to File Missing Parts of Application under 37 C.F.R. §1.53(d) dated 29 December 1994, attached please find:

[X] a combined Declaration and Power of Attorney by the inventor(s) and the surcharge of

[X] \$65.00 [] \$130.00 as set forth in 37 C.F.R.

§1.16(e):

- [X] a Declaration of Small Entity Status;
- [] a Petition for Extension of Time;
- [X] Executed Assignment document(s) with Recordation Form
 Cover Sheet(s);
- [] Other:
- [X] a check in the amount of \$664.00 is enclosed.
- [] Charge \$____ to Deposit Account No. 06-1300.

The Commissioner is hereby authorized to charge any fees under 37 C.F.R. §§ 1.16, 1.17 and 1.21 which may be required by this paper, or to credit any overpayment to Deposit Account No. 06-1300 (Order No. A-60190/BIR STAN-171). This form is submitted in duplicate.

Respectfully submitted,

FLEHR, HOHBACH, TEST ALBRITTON & HERBERT

By:

Bertram I. Rowland, Ph.D. Registration No. 20,015

4 Embarcadero Center, Suite 3400 San Francisco, CA 94111-4187

U.S. Patents:

The Applicant(s) are not aware of any U.S. patents which they believe may be material to the examination of the referenced application.

Foreign published Applications or Patents:

The Applicants are not aware of any foreign published applications or patents which they believe may be material to the examination of the referenced application.

Other Printed publications:

The Applicants are aware of the following printed publications which may be material to the examination of the referenced application:

- 1. J.E. Hooper, et al., THE DROSOPHILA PATCHED GENE ENCODES A PUTATIVE MEMBRANE PROTEIN REQUIRED FOR SEGMENTAL PATTERNING, Cell, Vol. 59, 751-765, November 17, 1989.
- 2. A.J. Forbes, et al., GENETIC ANALYSIS OF HEDGEHOG SIGNALLING IN THE DROSOPHILA EMBRYO, Development 1993 Supplement, 115-124 (1993).
- 3. P.W. Ingham, HEDGEHOG POINTS THE WAY, Current Biology 1994, Vol. 4, No. 4.
- 4. H. Roelink, et al., FLOOR PLATE AND MOTOR NEURON INDUCTION BY vhh-1, A VERTEBRATE HOMOLOG OF HEDGEHOG EXPRESSED BY THE NOTOCHORD, Cell, Vol. 76, 761-775, February 25, 1994.
- 5. J. Heemskerk, et al., DROSOPHILA HEDGEHOG ACTS AS A MORPHOGEN IN CELLULAR PATTERNING, Cell, Vol. 76, 449-460, February 11, 1994.
- 6. T. Tabata, et al., HEDGEHOG IS A SIGNALING PROTEIN WITH A KEY ROLE IN PATTERNING DROSOPHILA IMAGINAL DISCS, Cell, Vol. 76, 89-102, January 14, 1994.
- 7. S. Krauff, et al., A FUNCTIONALLY CONSERVED HOMOLOG OF THE DROSOPHILA SEGMENT POLARITY GENE hh IS EXPRESSED IN TISSUES WITH POLARIZING ACTIVITY IN ZEBRAFISH EMBRYOS, Cell, Vol. 75, 1431-1444, December 31, 1993.
- 8. Y. Echelard, et al., SONIC HEDGEHOG, A MEMBER OF A FAMILY OF PUTATIVE SIGNALING MOLECULES, IS IMPLICATED IN THE REGULATION OF CNS POLARITY, Cell, Vol. 75, 1417-1430, December 31, 1993.
- 9. R.D. Riddle, et al., SONIC HEDGEHOG MEDIATES THE POLARIZING ACTIVITY OF THE ZPA, Cell, Vol. 75, 1401-1416, December 31, 1993.

- 10. Y. Nakano, et al., A PROTEIN WITH SEVERAL POSSIBLE MEMBRANE-SPANNING DOMAINS ENCODED BY THE DROSOPHILA SEGMENT POLARITY GENE PATCHED, Nature, Vol. 341, October 12, 1989, pp. 508-513.
- 11. A.A. Simcox, et al., IMAGINAL DISCS CAN BE RECOVERED FROM CULTURED EMBRYOS MUTANT FOR THE SEGMENT-POLARITY GENES ENGRAILED, NAKED AND PATCHED BUT NOT FROM WINGLESS, Development 107, 715-722 (1989).
- 12. A. Hidalgo, et al., CELL PATTERNING IN THE DROSOPHILA SEGMENT: SPATIAL REGULATION OF THE SEGMENT POLARITY GENE PATCHED, Development 110, 291-301 (1990).
- 13. R.G. Phillips, et al., THE DROSOPHILA SEGMENT POLARITY GENE PATCHED IS INVOLVED IN A POSITION-SIGNALLING MECHANISM IN IMAGINAL DISCS, Development 110, 105-114 (1990).
- 14. A.M. Taylor, et al., CONTRASTING DISTRIBUTIONS OF PATCHED AND HEDGEHOG PROTEINS IN THE DROSOPHILA EMBRYO, Mechanisms of Develop., 42 (1993) 89-96.
- 15. P.W. Ingham, et al., ROLE OF THE DROSOPHILA PATCHED GENE IN POSITIONAL SIGNALLING, Nature, Vol. 353, September 12, 1991, pp. 184-187.
- 16. J. Sampedro, et al., UNRESTRICTED EXPRESSION OF THE DROSOPHILA GENE PATCHED ALLOWS A NORMAL SEGMENT POLARITY, Nature, Vol. 353, Sept. 12, 1993, 187-190.

Copies:

A copy of each of the items listed on Form PTO-1449 is enclosed.

The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to Deposit Account No. 06-1300 (order no. A-60190/BIR). Two duplicate copies of this paper are enclosed.

Respectfully submitted,

FLEHR, HOHBACH, TEST ALBRITTON & HERBERT

Bret E. Field

Registration No. 37,620

4 Embarcadero Center, Suite 3400 San Francisco, CA 94111-4187 (415) 781-1989